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ABSTRACT

The importance of family to identity is an accepted tenet of identity theories, though there is some dispute about the nature of this parental relationship and its facilitation of identity formation. This study investigated the relationship between the two developmental constructs of identity and attachment. Using the Identity Status Paradigm, hypotheses were tested with 329 college seniors regarding the relationship of parental attachment and the presence/absence of the processes of exploration of identity alternatives and commitment to specific aspects of identity. Analyses included a multivariate analysis to assess differences among identity statuses on variables of parental emotional support/affect and parental encouragement of autonomy, and a discriminant analysis to test whether these variables could better classify females into identity status in comparison to males. The hypothesis that a positive connectedness with parents would distinguish between identity statuses reflecting commitment versus those lacking commitment was largely supported. The hypothesis that greater parental encouragement of autonomy would characterize identity reflective of both exploration and commitment received limited support. The autonomy variable reflected differences when comparing identity characterized by both exploration and commitment with identity lacking both exploration and commitment. Attachment variables did not better classify females into identity status in comparison to males. Contains 33 references. (LSR)

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Parental Attachment and Identity Formation In Late Adolescence

by

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ABSTRACT

This study investigated the relationship between the two developmental constructs of identity and attachment. The importance of the family to identity is an accepted tenet of identity theories, though there is some dispute about the nature of this parental relationship and its facilitation of identity formation. Using the Identity Status Paradigm operationalized by Marcia (1966), hypotheses were tested regarding the relationship of parental attachment and the presence/absence of the processes of exploration of identity alternatives and commitment to specific aspects of identity. Three hundred twenty-nine college seniors (mean age=21.88 yrs.) generated the data for these analyses. Analyses included (a) a multivariate analysis to assess differences among identity statuses on variables of parental emotional support/affect (CONNECT) and parental encouragement of autonomy (PAUTO), and (b) a discriminant analysis to test whether the above mentioned variables could better classify females into identity status in comparison to males. The hypothesis that a positive connectedness with parents would distinguish between identity statuses reflecting commitment versus those lacking commitment was largely supported. This finding is consistent with the theory that a supportive relationship with parents is conducive to committing to a sense of self. The hypothesis that greater parental encouragement of autonomy would characterize identity reflective of both exploration and commitment received limited support. The autonomy variable reflected differences when comparing identity characterized by both exploration and commitment with identity lacking both exploration and commitment. Attachment variables did not better classify females into identity status in comparison to males, and no significant differences between gender were noted on attachment variables.

INTRODUCTION

The focus of this study was on two constructs from developmental theories-identity and attachment. Specifically, this study sought to investigate the relation between parent-adolescent relationships and the processes involved with adolescent identity development. The premise underlying the study was that interpersonal relationships (particularly those with parents) are important to the processes utilized in identity formation. Attachment theory and the Identity Status Paradigm provide a conceptual basis for understanding this relationship.

The term "identity" as used in the psychological literature has been linked with a wide spectrum of topics including vocation, gender, sexuality, religion, ethnicity, politics, and social roles. Erikson (1968) described identity as "a progressive continuity between that which he has come to be during the long years of childhood, and that which he promises to become in the anticipated future; between that which he conceives himself to be and that which he perceives others to see in him and to expect from him" (p.87). Erikson's (1968) theory of development throughout the life span describes the development of identity as being the central task of adolescence. In this theory, he describes a series of eight developmental phases during which particular "crises" are present that create or hinder growth. These turning points are believed to be typical of development throughout life.

The developmental phase during which identity resolution is the specified crisis is the fifth of eight developmental phases. Identity formation is achieved by integrating values, beliefs, and behaviors into a consistent whole. The positive resolution at this decision point is a stable identity, characterized by consistency and continuity of roles. The failure to achieve identity results in identity confusion. This confusion is characterized by uncertainty in commitments to beliefs and inconsistency in life roles across a variety of domains (e.g., student, friend, worker, family member).

Erikson (1968) provided a framework for identity from which other researchers have attempted to operationalize its components. Marcia (1966) introduced a way of studying identity by looking at the processes by which identity is formed. He posited that identity

could best be described by discussing the presence or absence of (a) exploration and (b) commitment. Exploration refers to "problem-solving behavior aimed at eliciting information about oneself or one's environment in order to make a decision about an important life choice" (Grotevant, 1987). Exploration of identity roles involves branching out to novel experiences and exposing oneself to the unfamiliar in an attempt to come to some personal perspective. Commitment refers to the "degree of personal investment the individual exhibits" (Marcia, 1966, p.551). Commitment involves an adherence to a perspective and the crystallization of personal belief. Using these processes, Marcia developed the Identity Status Paradigm, a system of categorizing individuals into one of four states describing the way in which they are currently approaching the task of identity formation (see Table 1). These states and their definitions follow:

Table 1

Identity Status Paradigm

		Exploration	
		Present	*Absent*
Commitment	*Present*	Achievement	Foreclosure
	Absent	Moratorium	Diffusion

(a) identity diffusion: state characterized by absence of both exploration and commitment on various salient life roles.

(b) identity foreclosure: state characterized by commitment to roles without the evidence of exploring alternatives or challenging preexisting beliefs.

(c) identity moratorium: state characterized by exploration of options without having yet made a commitment to roles.

(d) identity achievement: state characterized by both the exploring of alternative beliefs and the challenging of preexisting beliefs as well as making commitments to beliefs in conjunction with this exploration.

The Identity Status Paradigm provides a method for operationalizing the construct of identity in such a way that the processes can be assessed regardless of identity content (e.g., vocation, gender, political). The statuses are believed to be developmental in nature progressing from the status lacking both exploration and commitment (diffusion), to a status of commitment without exploration (foreclosure), to a status reflecting exploration without commitment (moratorium), finally to a state reflective of both exploration and commitment (achievement). Though development is progressive, movement among the statuses is not always linear and may involve some transitioning to less advanced statuses at times.

The initial development of the Identity Status Paradigm included aspects of identity focused on ideological areas, such as one's perspective on politics, religion and one's vocation. At that time, these were the areas assumed to be most salient to identity formation (Marcia, 1966). Since that time, researchers have expanded the repertoire of identity domains to include identity roles of a more interpersonal nature (Grotevant, Thorbecke, & Meyer, 1982). These areas include gender roles, friendships, leisure activities, and dating.

Waterman (1982) presented a developmental model for identity formation which suggested that role models (e.g., parents) influence the processes of exploration and commitment and thus the progression from one identity status to another. He suggests that encouragement to explore various life options is a factor in generating movement from a diffused state to one that reflects exploration. In the same manner, when the choices made by the adolescent receive support/approval, commitments are more probable. Waterman's model is congruent with identity theory that emphasizes the importance of parental involvement into adolescence while specifying how the parental relationship might influence this development of identity (e.g., affecting the processes of exploration and commitment). This theory is supported by studies indicating a positive relationship between parental support and the processes exploration and commitment (Hauser et al., 1984;

Grotevant & Cooper, 1985; Blustein, Walbridge, Friedlander, & Palladino, 1991). In these studies, the association between parental relationships with the processes of commitment or exploration generally involves a particular aspect of development (e.g. communication, vocation). Rather than perceiving emotional support from parent as being in some way a threat to development, Waterman's (1982) model would propose that growth is facilitated through positive parental involvement. Parents reinforce commitments by providing support for decisions made by the adolescent. The process of identity exploration is also reinforced by parents who encourage this behavior. In this regard, having the support of others while engaging in the process of exposing oneself to the unfamiliar is believed to provide a sense of comfort.

An identity formation model emphasizing parental involvement is not a shared perspective among identity theorists. A dichotomy seems to exist between theories that characterize identity development as being independent of parental influence and those theories that view supportive parental relationships as integral to successful identity development. The perspectives offered by traditional theorists (e.g., Erikson, 1968) emphasize the former view that identity is characterized by parental separateness. This perspective makes the assumption that adolescent identity is ideally characterized by independence and autonomy as indicated by emotional separation from parents (Blos, 1979).

In contrast, Josselson (1980) de-emphasized the adolescent's separateness from parents. She posits that continued support from parents is essential to healthy development and forming a solid sense of self. Independence and attachment are not dichotomized but she states that autonomy grows in the context of connectedness with others (Josselson, 1988).

The importance of interpersonal relationships (such as that with parents) in the formation of identity has been emphasized especially in discussions of female identity development (Josselson, 1987). Rather than viewing interpersonal relationships as being a hindrance to identity, they are believed to be a critical component for healthy identity

development. Women, in particular, are believed to demonstrate a preference for "connectedness" with others that may be associated with characteristics of intimacy prior to or in conjunction with the development of their identity (Josselson, 1987; Straub & Rodgers, 1986; Straub, 1987). Popular developmental theories such as the one proposed by Erikson (1968) have been criticized as reflecting a male bias and discounting interaction styles traditionally associated with female tendencies (Gilligan, 1982); and the importance of connectedness is increasingly being addressed in more contemporary developmental models (Franz & White, 1985).

Given the traditional emphasis within developmental theory on establishing independence during this adolescent period, the question of how to modify theory to account for the importance of interpersonal relationships is raised. One response to this question has been to conceptualize the developmental theory of identity formation within the context of another developmental theory--that of attachment theory. Attachment theory addresses the parent-adolescent bond, a focus of several lines of research with some common assumptions about the link between family relationships and identity development (Adams, Dyk, & Bennion, 1987).

Attachment is a term that has historically been used to describe the bond between parent and child during infancy and the early developmental years. The theory of attachment posits that in infancy, individuals begin to interact with primary caregivers in a way that shapes their view of the world. Bowlby (1969) proposed that the bond established between infants and their parents serves a protective function and provides children with a sense of security. This sense of security is reflected in greater exploratory behavior and the development of competency (Ainsworth, Blehar, Waters, & Wall, 1978; Grossman & Grossman, 1991).

Attachment theory provides a means of explaining the nature of the parent-adolescent relationship and can provide a context for why this relationship affects identity development. The positive bond between parent-child facilitates growth. Adaptive growth for the adolescent is indicated by the presence of commitment and exploration processes.

Attachments which are not characterized by positive interaction influence growth differently. The focus of this study is on positive interaction described as "secure attachment".

Secure attachment is distinguished from other attachment styles characterized by lack of interaction between caregiver-child, or presence of clinginess. Individuals who have a secure attachment with parents are those who can openly communicate with parents and who can depend on them to provide encouragement and affection. The behavior of these individuals would suggest that the bond with their parents is one that provides a sense of safety and comfort. The attachment bond is not one of restriction, but rather a relationship conducive to the growth of the child/adolescent. A secure attachment is characterized by the caregiver encouraging independent actions of the child, the caregiver being available for the child, and the child being able to return to the caregiver in times of stress.

Secure attachments are associated with greater exploration and independence in both toddlers and adolescents (Ainsworth et al., 1978; Armsden & Greenberg, 1987; Kenny, 1987). The secure base provided by caregivers allows individuals to investigate their environment with confidence, knowing that they can return to a haven of security during times of threat.

Both attachment theory and identity development theory place emphasis on branching out and investigating new things. Given this freedom to explore, individuals are freed from past beliefs, behaviors, and values, and can more comfortably extend themselves to try out other perspectives. Parental support and responsiveness to the child's behavior is linked with the child's development of competency (Grossman & Grossman, 1991). This parental support concept is also congruent with the previously mentioned developmental model of identity development presented by Waterman (1982), who proposed that the support from significant others is conducive to the process of committing.

Although attachment theory was developed from the study of infants/toddlers, it appears that the tenets of secure attachment are applicable to the adolescent identity formation processes of exploration and commitment associated with adolescents. The bond with parents communicates a sense of acceptance to the adolescent which allows him/her

to be free to try on new roles and to begin to make independent decisions while still maintaining a sense of comfort in the knowledge that the parents are there to support this behavior.

Parental support has been linked with making commitments (Blustein et al., 1991). Blustein et al. (1991) found that increased parental communication and support were positively related to career commitment. Indirectly, parent-adolescent relationships characterized by trust and communication were associated with greater life satisfaction and higher self-esteem, whereas less trust and communication were associated with lower life satisfaction and self-esteem (Armsden & Greenberg, 1987). The presence of attachment variables such as trust, communication, and emotional support have also been linked with increased assertion, social competence, and college adjustment (Armsden & Greenberg, 1987; Kenny, 1987; Lapsley, Rice & FitzGerald, 1990). These qualities are also associated with the achieved identity status (Marcia, 1980).

The relationship between parental attachment and identity status generally has been investigated as to whether more advanced identity statuses are related to more positive parental relationships (Campbell et al., 1984; Benson, Harris, & Rogers 1992). This would imply that a positive parental relationship was associated with the presence of the processes of exploration and commitment. Campbell, Adams, and Dobson (1984) tested how the attachment variables of affection, communication, and independence differentiated among identity statuses. They proposed that shared affection and acceptance of autonomy promote a sense of security allowing for "self-defined commitments" (p.512), such as present in the achieved status. Identity characterized by lack of exploration and presence of commitment (foreclosed status) was proposed to reflect strong parental affection. This was supported in that adolescents in the foreclosure status reported a higher level of parental affection in comparison to those in the diffusion status (the moratorium status and diffusion status groups did not differ from others groups). The mothers of adolescents in the moratorium and diffusion status groups reported significantly less affection in the parent-

adolescent relationship in comparison to mothers of adolescents in the achievement and foreclosure status groups.

The hypothesis that parental communication and encouragement of independence would be higher for the groups of moratorium and achievement, in comparison to the other two identity groups was supported—a finding consistent with the assumption that encouragement of autonomy facilitates exploration.

Benson et al. (1992) also compared identity statuses using an attachment measure, proposing that secure attachment facilitated both commitment and exploration in identity formation. Their results indicated that maternal attachment predicted higher achievement identity and lower moratorium and diffusion identity characteristics. Paternal attachment also predicted higher levels of foreclosure identity characteristics.

Benson et al. (1992) and Campbell et al. (1984) provided a catalyst for the current study. In comparison to the Campbell et al. (1984) study, the current study investigated how attachment differed across identity status groups, with an emphasis on the importance of parental relatedness and support for autonomy to identity development. More specifically, this study proposed that parental relationships influenced the processes of commitment and exploration involved in identity formation. Rather than proposing that parental emotional support independently produces growth in the identity formation hierarchy (in which the prediction would be that the moratorium group would reflect greater emotional support than the foreclosure group), the current study proposed that emotional support affected the commitment process in identity formation. This is consistent with Waterman's (1982) perspective that parental support serves as a reinforcement for adherence to life alternatives.

Some studies have shown that the processes of exploration and commitment in identity differ across gender (Kenny, 1990; Blustein et al., 1991). This is not clearly reflected in the results of Benson et. al. (1992) or Campbell et al. (1984). It is possible that the parental relationship affects the identity formation processes in a similar manner for both genders (e.g. emotional support/affection facilitates commitment, encouragement of autonomy

facilitates exploration), however, the strength of these relationships may be more salient in explaining female identity development.

The tenet that one's family is important to the task of developing identity is agreed upon by theorists from differing schools of thought, though the way in which family plays a role in identity definition is controversial. Attachment theory provides a framework from which to make hypotheses about identity development using concepts such as trust, emotional support, communication, and fostering independence. Though previous research has investigated how attachment distinguished between identity status groups, this study specifically proposed that positive attachment was related to the processes of commitment and exploration.

In sum, the attachment aspects of emotional support, positive communication, and affection (hereafter referred to as either connectedness or parental responsiveness) are believed to distinguish between those identity formation states that reflect commitment versus those that lack commitment. The second aspect of attachment under investigation, facilitation of autonomy, was believed to be most evident in the identity state reflective of both exploration and commitment, i.e. achieved status. Males and females were believed to reflect these differences, though the influence of attachment was believed to greater influence the distinction of identity formation in females. The following is a restatement of the hypotheses:

Hypothesis 1: Parental emotional support/affection were hypothesized to be greater for the identity status groups of foreclosure and achievement in comparison to the identity status groups of diffusion and moratorium.

Hypothesis 2: Parental facilitation of autonomy was hypothesized to be greater for the identity status group of achievement in comparison to the three identity status groups of foreclosure, diffusion, and moratorium.

Hypothesis 3: Parental emotional support/affection and parental facilitation of autonomy was hypothesized to better classify females than males into identity status groups.

METHOD

Participants

Participants were a random sample of upper-division students at the University of Kansas. Inclusionary criteria were the following: (a) undergraduates between the ages of 20 and 24, and (b) completion of a minimum of 90 college credit hours by the end of the Fall '93 semester. International students were excluded from the sample in order to control for cultural factors that potentially could affect results. The random sample was taken from first day of classes enrollment of the Spring '94 semester. Of the 1000 students contacted to participate in the study, 399 returned materials for a 39.9 % return rate. Of this number, 329 participants' materials were deemed usable. Six were eliminated due to incomplete responses, and 64 were not used in the analysis due to ambiguity in their responses. An explanation for the decision to eliminate ambiguous responses is addressed later in the methodology. Of the 329 valid responses, 193 (58.7%) were from females and 136 (41.3%) were from males The participants ranged in age from 20 to 24 years. The mean age was 21.88 years (SD=0.79). Please see Table 2 for other demographic information.

Instruments

Extended Version of Objective Measure of Ego Identity Status-2 (EOM-EIS 2: Bennion & Adams, 1986). The EOM-EIS 2 is a self-report instrument that consists of 64 items based on Marcia's theory of identity formation. The EOM-EIS 2 assesses both ideological (e.g., philosophical and occupational) and interpersonal identity status (e.g., friendship, dating, sex roles and recreational topics). There are eight items for both ideological and interpersonal identity for each identity status, for a total of 64 items. Individuals indicate on a scale from 1 to 6 the degree to which the statements describe their thoughts and feelings. A response of "1" indicates strong agreement to the statement and a response of "6" indicates strong disagreement. Responses are reverse scored so that high scores reflect a greater endorsement of characteristics of the identity status being assessed.

Table 2

Demographics Listed in Percentages (unless indicated)

	Males	Females
Gender	41.0	58.0
Marital Status		
Single	97.1	88.6
Married	2.2	7.8
Other	0	3.6
Family Status		
Both Parents	82.4	82.4
Single Parent	7.4	6.7
Blended Family	8.1	6.2
Other	2.2	4.7
Ethnicity		
Caucasian	89.0	88.1
African-American	0.7	3.1
Asian-American	4.4	2.7
Hispanic	4.4	2.1
Native American	0	1.2
Mean Age in years	22.04	21.77
Mean College Credit Hr.	119.75	125.25

Internal consistency indices (Cronbach alphas) for the ideological and interpersonal subscales range from .30 to .89, respectively (median alpha=.66; Adams, Bennion, & Huh,1989). Discriminant validity supports the theory underlying the instrument in that the identity achievement status scores are either unrelated or negatively related to the remaining three subscale measures of identity status; the foreclosure status subscales are unrelated to the other statuses subscales; and the moratorium and diffusion statuses have a significant positive correlation (Adams et al.,1989). Given the lack of differential hypotheses being based on the ideological and interpersonal domains, these areas were collapsed and each identity status is represented by one score (Adams et al., 1989). This approach to scoring has been previously used by Benson, Harris, & Rogers (1992).

Responses from the EOM-EIS 2 yield scores for each participant in each of the identity status categories: achievement, moratorium, foreclosure, diffusion. Students are classified into one of these four categories by comparing the elevation of each of these scales to the instrument's cutoff scores, derived by using scores that are one standard deviation above the mean on each of the scales, as recommended by the test manual (Adams et al., 1989). Students who have scores that are elevated on two categories are classified into the least sophisticated status. The concept of "ordering" identity statuses according to the degree of development is supported by the developer of these constructs (Marcia, 1988). The most developed to the least developed status are listed respectively as achievement, moratorium, foreclosure, diffusion. Thus, if a student had elevations on both foreclosure and diffusion, his/her status would be classified as diffusion. Students with scores higher than the cutoff on more than two statuses are considered not to have responded reliably given the contradictory endorsements this requires. These cases were considered invalid and were unusable in further analyses.

Students whose scores in each category did not exceed the cutoff (e.g., low scores in each category) were considered to be in a "low moratorium" category. Adams et al. (1989) suggests a statistical comparison be made between those students who met criteria to be placed in the "moratorium" category with those respondents in "low moratorium" to evaluate

their equivalency on the variables being assessed. Previous research indicates that they are very similar in terms of attitudes, values, and behaviors. A comparison was made between these groups on the attachment variables and they were not found to significantly differ. A single category of moratorium was used. The manual for this instrument can be obtained by contacting Dr. Gerald Adams, Department of Family Studies, University of Guelph, Ontario, CANADA NIG 2W1.

Parental Attachment Questionnaire (PAQ; Kenny, 1987). The theoretical base of the PAQ is "attachment theory" (Bowlby, 1968). The instrument assesses perceived parental characteristics such as sensitivity, emotional support, and respect for autonomy. It is a 55 item self-report instrument that allows participants to rate their relationship with parents. Items assess parental characteristics, relationships with parents, and feelings associated with parents. Participants rate the statements using a 5-point Likert scale where a score of "1" indicates "not at all" and a score of "5" indicates that the statement "very much" describes their relationships with their parents. Twenty-five items are reverse scored. High scores indicate high levels of attachment; and low scores indicate an absence of parental emotional support, positive affect, and fostering of autonomy.

The PAQ consists of three scales derived from a factor analysis: (a) affective quality of relationships (PAFFECT), (b) parental fostering of autonomy (PAUTO), and (c) parental role in providing emotional support (PEMSUP). Internal consistency is excellent for the three scales, with Cronbach alphas of .96, .88, and .88 respectively (Kenny, 1987). The two-week test-retest reliability coefficients range from .82 to .91.

There are two forms of the PAQ. One form assesses attachment for each parent separately; the other asks for responses rating parents collectively. For the present study the combined parental form was used because (a) the study's hypotheses are not based on differential predictions for each parent and (b) the number of variables was limited in order to restrict the number of comparisons and control for inflated statistical error. Additionally, the parental form is more prevalent in the literature and has more information available

regarding its psychometric properties. Kenny (1987) reports that there is no significant difference between ratings for fathers and mothers on the three scales.

Although the author of the PAQ has identified three separate factors, previous research suggests that two of the factors (emotional support and affection) are significantly related, suggesting that the constructs being measured share a great deal of similarity (Kenny & Hart, 1992; Kenny & Donaldson, 1991). Given the similarity in the nature of the factors of emotional support and parental affection, these factors have been collapsed in previous studies to avoid redundant comparisons (Kenny & Hart, 1992). Within the present study, the a priori decision to collapse these variables resulted in the creation of the variable referred to as "connectedness."

Procedures

The sample of 1000 students obtained from the University of Kansas were sent a packet of materials including the assessment inventories, a cover letter/consent form requesting their participation, and an envelope for the return of the assessment devices. The cover letter explained that the return of their materials indicated their willingness to participate in the study. The inventories were arranged in three parts in the following order for all participants: (a) demographic information, (b) PAQ , and (c) EOM-EIS 2. These materials were sent out during the first two weeks of the Spring '94 semester.

Approximately five days after sending these materials, a participant contacted the experimenter to inform her that there was a printing error on the Likert scale of the EOM-EIS 2. Instead of numbers "5" and "6" indicating "moderately disagree" and "strongly disagree" (as was intended), they stated "moderately agree" and "strongly agree" which were the descriptive statements for Likert scale numbers "2" and "1", respectively. Because of the potential that participants might respond incorrectly to the scale, an attempt was made to reach students by phone to alert them of this problem. Students were contacted and asked to indicate that they had been made aware of the error by circling the inventory number located in the upper right-hand corner of the front page. Those calling the students were provided with a script that alerted the students of the error, provided an opportunity to

answer questions, and encouraged them to complete the materials. Seven hundred fifty students of the 1000 were reached by phone. The remaining 250 students were sent a second copy of the materials with a corrected Likert scale. Students returning corrected forms or original forms with an indication that they had been alerted to the problem were designated as Group A, and participants whose responses did not indicate that the correction had been made were designated as Group B. Group A included 329 respondents including 301 subjects who corrected the initial form, and 28 subjects who returned the second form. Sixty-four respondents (Group B) did not indicate whether they had made the correction on the initial form sent to them.

Comparisons were made between the inventory responses that were in Group A (those that indicated they received the directions on correcting the printing error on the inventory) and Group B (those that did not indicate receipt of corrected instructions). T-tests were conducted using the four identity raw scores made to test whether there were significant differences between groups and to determine whether to include responses from the group of ambiguous responses (see Table 3).

Table 3

Differences Between Inventories With (Group A) & Without Noted Corrections (Group B)

Identity Raw Scores	Group A	Group B	t-score	df	prob.
Achievement	64.60	59.73	2.85	393	0.00
Moratorium	47.82	52.95	3.69	393	0.00
Foreclosure	33.46	47.16	11.00	393	0.00
Diffusion	42.40	49.32	5.45	393	0.00

The results of these t-tests suggested that the two groups responded quite differently. The decision was made not include those inventories in Group B in future analyses.

Data Analysis

Data were analyzed using SPSS programs for discriminant analysis, multivariate analysis, and analysis of variance. Following recommendations from the manual (Adams et al., 1989), t-tests were conducted between the groups of "low moratorium" and "moratorium" on the attachment variables of the PAQ to determine whether these groups should remain separate in future analyses. Scores from the two identity categories did not differ significantly on the variable of CONNECT, $t(198) = -1.15$, $p = 0.25$, or on the variable of PAUTO, $t(198) = -0.48$, $p = .63$.

Participants from the moratorium and low moratorium status categories were combined and treated as a single identity status in subsequent analyses. Table 4 summarizes the distribution of the identity statuses for the sample. Seven participants scored above status scale cutoff on more than two of the four criteria cutoffs and were eliminated from future analysis, as recommended by the EOMEIS-2 manual (Adams et al., 1989).

Table 4

Distribution of Identity Statuses

Identity Status	Number of Participants	Percentage of Sample
Achievement	61	18.5
Moratorium	200	60.8
Foreclosure	9	2.7
Diffusion	52	15.8
Total	322	97.8

Attachment variables scores were completed by reverse scoring the appropriate items and summing across the items for each of the three scales. Pearson correlations were computed between the attachment variables to assess their degree of intercorrelation. This was done in order to determine whether the variables of parental emotional support (PEMSUP) and parental affection (PAFFECT) (if highly correlated) needed to be combined The correlation (r=0.79) between these variables suggested a shared variance of over fifty percent, thus they were combined forming a "connectedness" variable referred to as CONNECT.

The correlation between autonomy and connectedness (r=.70), indicated a shared variance between autonomy and connectedness of less than 50%. Because autonomy had been conceptualized and hypothesized to provide unique information in distinguishing among statuses, this variable was kept distinct.

The first two hypotheses were addressed using a 2x4 Multivariate Analysis of Variance (MANOVA) and follow-up Analysis of Variance (ANOVA) on the identity main effect for the two attachment variables. The third hypothesis specifically addressed gender by positing that the combination of attachment variables, emotional support/affection and facilitation of autonomy, would differentiate between identity statuses better for females than for males, thus separate discriminant function analyses were run for males and females to assess the degree to which these variables resulted in the correct classification within their respective identity classes.

The literature suggests that attachment may vary depending on variables such as the type of family in which a person was reared, or marital status. Though specific questions regarding these characteristics were not posited in this study, exploratory analyses were conducted using one-way ANOVAs with CONNECT and PAUTO as the dependent variables and marital status and family composition as independent variables.

RESULTS

Two analyses were initially conducted, a 2x4 Multivariate Analysis of Variance (MANOVA) and a Multiple Discriminant Analysis (MDA). Follow-up comparisons using Analysis of Variance (ANOVA) were made contrasting identity status groups.

Differences between identity status groups on connectedness and facilitation of autonomy were tested using MANOVA procedures. Prior to investigating the main effect of identity (on which the hypotheses were based), the interaction effect of identity x gender, and the gender main effect were evaluated. The identity x gender interaction effect was not significant, $F(6,626)=0.92$, $p=0.49$, nor was the gender main effect, $F(2, 313)=1.55$, $p=0.21$. A significant main effect for identity was supported as hypothesized, $F(6,626)=2.23$, $p<0.04$. The finding of a significant main effect for identity status was pertinent to the subsequent analyses involved in testing hypotheses 1 and 2. Univariate analyses within the MANOVA procedure indicated significant differences among identity status groups for both dependent variables, CONNECT, $F(3,314)=3.48$, $p=.02$; and PAUTO, $F(3,314)=3.02$, $p=0.02$ (see Table 5).

Table 5

Differences in Attachment Within Gender and Identity Status Variables

Variable(s)	F	df	prob.
Multivariate Effects			
Identity x Gender	0.92	6,626	0.49
Gender	1.55	2,313	0.21
Identity	2.23	6,626	0.04
Univariate Effects			
CONNECT	3.48	3,314	0.02
PAUTO	3.02	3,314	0.03

Research Question 1:

The first hypothesis that parental responsiveness, as defined by the combination of emotional support and affect (CONNECT variable), would be greater between identity statuses characterized by commitment (achievement and foreclosure) than those without commitment (moratorium & diffusion) was supported in general. The significant MANOVA, $F(6, 626)=2.23$, $p=0.04$, permitted follow-up ANOVAs contrasting dependent variables between groups. See Table 6 for the means and standard deviations of each group according to gender for the dependent variables.

The multi-variate contrast between the achievement group and diffusion group was significant, $F(2, 313)=4.32$, $p=0.01$. On the CONNECT variable, the achievement group had greater connectedness than the diffusion group , $F(1,314)=6.96$, $p=0.01$. The achievement group did not significantly differ from the moratorium group on the CONNECT variable, though the analysis approached significance in the predicted direction, $F(1,314)=3.21$, $p=0.07$.

The foreclosure group also significantly differed from the diffusion group with the foreclosure group having greater connectedness than the diffusion group as predicted $F(1,314)=5.78$, $p=0.02$. . Like the contrast between the achievement group and the moratorium group on the CONNECT variable, the contrast between the foreclosure group and moratorium group did not yield a significant difference in the univariate analysis, though the analysis approached significance in the anticipated direction, $F(1,314)=3.43$, $p=0.07$.

The groups reflecting commitment, foreclosure and achievement, did not differ significantly on the CONNECT variable, $F(1,314)=0.82$, $p=0.37$. The groups lacking identity commitment, diffusion and moratorium, also did not differ on the CONNECT variable, $F(1,314)=2.48$, $p=0.12$.

The second hypothesis that on the variable of parental facilitation of autonomy (PAUTO) there would be a difference between the achieved group (reflecting both exploration and commitment) endorsing greater parental facilitation of autonomy than the groups of moratorium, foreclosure, and diffusion (those lacking either exploration or

Table 6
Means and Standard Deviations on the Variables of CONNECT and PAUTO

Variable: CONNECT

Identity Status:	Achievement		Moratorium		Foreclosure		Diffusion	
	M	SD	M	SD	M	SD	M	SD
Male:	147.67	20.64	137.08	22.22	156.33	20.11	135.46	22.13
Female:	148.69	23.91	144.55	23.86	156.50	24.17	134.69	26.49

Variable: PAUTO

Identity Status:	Achievement		Moratorium		Foreclosure		Diffusion	
	M	SD	M	SD	M	SD	M	SD
Male:	60.58	6.37	56.08	7.93	59.00	5.29	53.08	9.14
Female:	55.65	10.3	55.74	8.23	57.03	7.94	52.73	11.4

commitment) was minimally supported. The significant MANOVA, F(6,626)=2.23, p=0.04, permitted follow-up ANOVAs to contrast identity groups on the PAUTO variable.

In general, this hypothesis was not supported with exception that the achievement group was found to have significantly higher scores than the diffusion group on the PAUTO variable, F(1,314)=7.81, p=0.01. Other groups did not significantly differ from the achievement group on the PAUTO variable. The moratorium group did have significantly higher PAUTO scores than the diffusion group, F(1, 314)=4.83, p=0.03. The difference between the diffusion group and foreclosure group approached significance, F(1,314)=2.73, p=0.10 (with the foreclosure group scoring higher than diffusion group).

The third hypothesis that aspects of attachment were more salient to the prediction of female identity formation than they were for male identity development as no supported. connectedness and facilitation of autonomy would better classify females than males into their appropriate identity status. This hypothesis was tested using multiple discriminant analyses. Separate analyses were conducted for males and females to provide information on the proportion of correctly classified males and females. It was hypothesized that the female interpersonal emphasis would be reflected in the greater discriminating strength of This hypothesis was not supported, and indeed neither the female nor male groups formed a significant discriminant function. For females, *Wilks Lambda* =0.96, p=0.22. For males, *Wilks Lambda* =0.92, p=0.09.

Given some evidence of differences in attachment ratings from intact families in comparison to children who were not reared by both parents, the question was posited as to whether the family environment in which a child was reared reflected differences in the attachment variables. Two one-way ANOVAs were run with the family composition variable as the independent variable, and CONNECT and PAUTO as the dependent variables. The "family composition" options available were "2-parent", "blended family", "single-parent", or "other". The "other" category consisted of students who wrote in responses to indicate by whom they were reared. The one-way ANOVA on the CONNECT variable was significant, F=3.87 (3, 325), p=0.01.

Follow-up comparisons using Scheffe (.05) contrasts revealed significant differences with students reared by both parents reporting greater connectedness in comparison to students who wrote in a response stating that the described options did not fit them. The analysis failed to reflect a difference between family types on the PAUTO variable, $F(3,325)=1.37$, $p=0.25$.

Another characteristic referenced in the literature is marital status of the offspring being related to parental attachment (Frank et al., 1988). Comparisons across participants' marital status on the CONNECT and PAUTO variables were made using one-way ANOVAs. Participants were classified into one of the following three marital status categories: (a) single; (b) married; (c) other (which people generally endorsed indicating that they were engaged). The one-way ANOVA for the PAUTO variable was not significant, $F(2,325)=1.87$, $p=0.05$; however, there was a significant difference noted on CONNECT, $F(2,325)=4.32$, $p=0.01$. Follow-up comparisons using Scheffe contrasts (.05) indicated that participants who were married had significantly greater scores on CONNECT than their single peers.

Discussion

In sum, only the first of the three hypotheses received conditional support. The first hypothesis that greater parental connectedness was present between identity status groups characterized by commitment (foreclosure and achievement) versus those groups lacking commitment (diffused and moratorium), was partially supported. Identity status groups reflecting commitment (e.g., achievement and foreclosure) had greater parental connectedness in comparison to the group that lacked both commitment and exploration (e.g., diffusion) in their identity formation. The moratorium group (characterized by lack of commitment) did not reflect significantly less parental connectedness than the identity groups characterized by commitment, however, the differences approached significant in the direction of there being greater parental connectedness for groups with commitment. These findings provide empirical support for the "secure base" effect described in attachment theory and fits with Waterman's (1982) description of identity development. Without this positive relatedness, commitments may not receive the external validation that

facilitates the continuance of commitment (as referenced in Waterman's developmental theory).

Connectedness with parents provides a "reference point." An analogy is the use of an anchor in assisting a vessel to gain stability before starting off in a particular direction. This parental connectedness can be conceptualized as a source of stability that allows for decisions to be made. This attachment-commitment association gives credence to theory that identity development is enhanced (not hindered) by relationships with others (Josselson, 1988).

It is tempting to infer that positive attachment creates conditions for healthy identity development. Causality, however, cannot be assumed given the study's design, and other alternatives must be considered. In addition to the interpretation that connectedness with parents facilitates commitment, an alternative explanation is that adolescents who have made commitments to identity are more comfortable with themselves and more positive in their evaluations of their parents. To better address the causal influence of attachment on identity development, longitudinal studies beginning in childhood are warranted. For causality to be inferred, one would expect positive parental relationships to be present prior to growth in identity exploration and commitment. Another method of exploring the causal link between attachment and identity development would be to identify groups characterized by positive parental interaction and lack of positive parental interaction. By monitoring these individuals and periodically assessing their identity development (as well as the nature of their current parent relationship), more information on the attachment-identity development association may be obtained.

The presence of positive connectedness with parents appears to be associated with commitment in identity, but does not reflect a difference between persons that have committed without exploration versus those who have experienced both exploration and commitment. An explanation for this finding is that connectedness with parents may be more salient to resolution of identity decisions (as reflected by commitment), even though

resolution may not have occurred after a period of exploration. Parental support may provide stability, but not inherently foster exploration.

The parental connectedness variable also reflected differences in the exploratory analyses on participants' marital status and family composition. Connectedness for married participants was greater in comparison to their single peers. This is consistent with the findings of Frank et al. (1988) who hypothesized that married students tend to feel more bonded toward their parents. Results also suggested that participants from two-parent families had a greater degree of connectedness than participants reared in atypical environments (e.g., reared by other family members). Given that parents were not the primary source of childrearing, an assessment asking for parental attachment ratings may have impacted these results.

In general, the second hypothesis that parents' encouraging autonomy would be greater for the identity group characterized by exploration and commitment than groups lacking one or both of these processes was not supported. The achieved group (characterized by the presence of both exploration and commitment) did reflect more parental facilitation of autonomy than the diffused identity group (lacking both exploration and commitment). The difference between the achieved and diffused groups would suggest that the parental encouragement of autonomy is associated with the processes of commitment and exploration collectively. This is not inconsistent with the rationale underlying the hypothesis. If one would expect a greater encouragement of autonomy in persons having experienced commitment and exploration, then the greatest discrepancy would intuitively be when comparing persons lacking both commitment and exploration in the identity formation process.

The diffused group also reported less parental encouragement for autonomy in comparison to the moratorium group. In comparing diffusion and foreclosure groups, a significant difference was not noted, though the difference approached significance with the diffusion group endorsing less parental facilitation of autonomy than the foreclosure group This would suggest that encouraging autonomy need not be associated with both

exploration and commitment in conjunction with each other. When this aspect of attachment is present, some activity in the identity formation process is occurring as indicated by the presence of exploration or commitment. An explanation for this finding may be that less parental facilitating of autonomy is associated with the absence of exploration and commitment.

The third hypothesis regarding gender differences with respect to identity status prediction also was not supported. For this hypothesis to have been supported, parental connectedness and facilitation of autonomy would have been found to better distinguish among female identity statuses in comparison to those of males. Connectedness and autonomy in relation to parents did not better distinguish female identity status.

One limitation of the study is the assessment of attachment to parents collectively (i.e., attachment to both mother and father), rather than independently assessing the attachment of the adolescent with each parent. A collective measure may mask differences between parents. Another limitation is the degree to which the results can be generalized beyond the sample used in this study. The participants in this investigation were predominantly Caucasians from two-parent households and the exploratory analysis in this study found significant differences in the degree of attachment between groups of students who were raised in homes that were atypical (such as being raised by other family members), in comparison to two-parents homes. Before generalizations regarding populations that differ on these characteristics can be made, more information would be needed.

Although the causal effects of parental attachment on student identity development cannot be determined from this investigation, the findings do have potential for redirecting current approaches to working with individuals during late adolescence. Specifically, this study's finding that connectedness with parents is associated with the presence of identity commitment challenges the idea that one should emphasize separateness from parents in order to facilitate the identity development process (possibly to the degree of detachment). Indeed, the results suggest that a positive parental relationship of support and availability may be desirable to identity formation. This is consistent with the perspective taken by

Lopez (1992) who concluded based on his review of family dynamics in identity development literature that the family creates "a climate wherein both the adolescent and his or her parents can acknowledge and affirm the former's increasing independence and capacity for self direction while, at the same time, maintaining satisfactory contact" (p. 271). In designing programs aimed at adolescent adaptive growth, family factors may need to be considered if adaptive growth is not taking place.

Perhaps one of the most significant implications of this study pertains to university personnel whose roles include assisting students who appear to be having problems with deciding on various life commitments. An area in which this concept of identity formation may be particularly useful is the university counseling center. Frequently student crises during late adolescence evolve around some aspect of identity (e.g., vocation, interpersonal relations, sexuality, religious beliefs). A means of assessing this crisis could be through evaluation of whether the client is (or has) engaged in exploration and whether commitments have been made. Another aspect of assessment would be whether these commitments receive support. For example, students who are in the process of exploration but lack a secure positive relationship with parents may benefit from interventions directed at fostering parental connectedness or helping the students identify other sources of potential support.

From a research perspective, this study establishes a springboard for other investigators to evaluate identity formation processes and specific aspects of attachment. Given that the moratorium identity status is believed to be the least stable, and a large number of students in this study were classified in this category, assessment of identity statuses later in life may better reflect a more stable identity status. Though some evidence has been provided in this study that supports a model of identity development that includes importance of positive parental relationships, this relationship was not found to be more salient for females. Rather than abandon the concept of gender differences in development, additional research in attachment could address (a) more diverse assessment of

attachments to include other attachment figures or more diverse aspects of family bonds, and (b) gender differences in regards to parent gender rather than adolescent gender.

In conclusion, attachment and identity formation theories have concepts that can be synthesized to provide a better understanding of development. For both males and females, connectedness with parents may be considered valuable to the identity resolution process. A positive relationship with parents has implications for adaptive growth far beyond the first few years of life--the initial focus of attachment theory. In addition to extending the scope of attachment theory, this study also provides support for a conceptualization of identity that is not formed in isolation from relationships.

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